Applicants: Manz et al. Serial No.: 10/009,467 Filed: April 5, 2002

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Please amend the application as follows:

## **AMENDMENT**

Please amend the above-identified application as follows:

## IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (currently amended): An electrodeposition bath for depositing glossy gold and gold alloy layers, comprising gold at least one gloss additive selected from the group consisting of pyridine-3-sulfonic acid, nicotinic acid, nicotinic acid amide, 3-(3-pyridyl)-acrylic acid, 3-(4-imidazolyl)-acrylic acid, 3-pyridylhydroxymethanesulfonic acid, pyridine, picoline, quinolinesulfonic acid, 3-aminopyridine, 2,3-diaminopyridine, 2,3-di-(2-pyridyl)-pyrazine, 2-(pyridyl)-4-ethanesulfonic acid, 1-(3-sulfopropyl)-pyridinium betaine, 1-(3-sulfopropyl)-isoquinolinium betaine and salts or derivatives thereof, wherein the bath further comprises an additional gloss additive, which has at least one compound of the general formula

$$R - SO_m - H$$
 (I)

in which wherein m is the number 3 or 4,

and when m is 3, R represents a straight-chain or branched or cyclic alkyl group with up to 20 carbon atoms,

and when m is 4, R represents a straight-chain or branched or cyclic alkyl group with up to 20 carbon atoms or an aryl or heteroaryl group with up to 10 carbon atoms optionally substituted once or several times with straight-chain or branched alkyl groups with 1 to 14 carbon atoms.

Claim 2 (previously presented): An electrodeposition bath according to Claim 1, wherein the additional gloss additive contains at least one compound of the

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general formula I in which R is a straight-chain or branched alkyl group with 5 to 12 carbon atoms.

Claim 3 (previously presented): An electrodeposition bath according to Claim 1, wherein the additional gloss additive is selected from the group consisting of the compounds pentyl sulfonate, hexyl sulfonate, heptyl sulfonate, octyl sulfonate, nonyl sulfonate, decyl sulfonate, dodecyl sulfonate, cyclohexyl sulfonate, pentyl sulfate, hexyl sulfate, heptyl sulfate, octyl sulfate, nonyl sulfate, decyl sulfate, dodecyl sulfate, cyclohexyl sulfate or their isomers.

Claim 4 (previously presented): An electrodeposition bath according to Claim 1, wherein at least one compound of the general formula I is present in an amount of 0.01 to 10 g/l.

Claim 5 (currently amended): A process for electrodeposition of glossy gold and gold alloy layers, which comprises electrodepositing glossy gold and gold alloy layers using an electrodeposition bath containing gold and at least one gloss additive selected from the group consisting of pyridine-3-sulfonic acid, nicotinic acid, nicotinic acid amide, 3-(3-pyridyl)-acrylic acid, 3-(4-imidazolyl)-acrylic acid, 3-pyridylhydroxymethanesulfonic acid, pyridine, picoline, quinolinesulfonic acid, 3-aminopyridine, 2,3-diaminopyridine, 2,3-di-(2-pyridyl)-pyrazine, 2-(pyridyl)-4-ethanesulfonic acid, 1-(3-sulfopropyl)-pyridinium betaine, 1-(3-sulfopropyl)-isoquinolinium betaine and salts or derivatives thereof, and an additional gloss additive of the general formula

$$R - SO_m - H$$
 (I)

in which wherein m is the number 3 or 4,

and when m is 3, R represents a straight-chain or branched or cyclic alkyl group with up to 20 carbon atoms,

and when m is 4, R represents a straight-chain or branched or cyclic alkyl group with up to 20 carbon atoms or an aryl or heteroaryl group with up to 10

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carbon atoms optionally substituted once or several times with straight-chain or branched alkyl groups with 1 to 14 carbon atoms.

Claim 6 (previously presented): A process for the electrodeposition of glossy gold and gold alloy layers according to claim 5, wherein the electrodeposition occurs at a pH in the range of 3 to 6.

Claim 7 (previously presented): An electrodeposition bath according to Claim 1, wherein the bath further comprises one or more alloy elements in dissolved form.

Claim 8 (previously presented): An electrodeposition bath according to Claim 1, wherein the additional gloss additive contains at least one compound of formula I where R is a branched alkyl group with 6 to 10 carbon atoms.

Claim 9 (previously presented): An electrodeposition bath according to Claim 1, wherein at least one compound of general formula I is present in an amount of 0.1 to 5 g/l.

Claim 10 (previously presented): A process for the electrodeposition of glossy gold and gold alloy layers according to Claim 5, wherein the electrodeposition occurs at a pH in the range of 4 to 5.

Claim 11 (previously presented): A process for the electrodeposition of glossy gold and gold alloy layers according to Claim 5, wherein the bath further comprises one or more alloy elements in dissolved form.